

*Ch/E file copy -*  
*Please return*

Army War College  
Carlisle, Pa.  
11 September 1958

The Soviet Economy

Gen. Johnson, in inviting me to give this lecture, suggested that I focus it around eight questions which he posed concerning the Soviet economy, including its relations with the political leadership. At the outset, I should like to assure you that Gen. Johnson's ability to ask the right questions is far superior to my ability to supply the right answers. However, I hope that what follows is at least partially responsive to his questions.

Objectives of the Communist Leadership

The Soviet economy is shaped to serve the needs of the State, not the people. To understand why it is structured the way it is, what governs the establishment of relative priorities which control its development over time, we must start with the objectives of the Soviet leadership.

The long-range objective is, of course, world domination. Communism is above all else a revolutionary force, striving for a victory which will be evidenced by the liquidation of capitalism and the emergence of a Sovietized world order.

The most straightforward way to accomplish this objective would be by direct military action. Military outlays have continued to enjoy a first priority in Soviet planning. However, direct large-scale military action seems to be ruled out in a hydrogen weapon age as a calculated policy at least while there is a reasonable balance between the forces of the East and the West.

This caution does not rule out the possibility of small wars which,

- 2 -

in the opinion of the Soviet leaders, would not develop into a general East-West conflict.

Further, there is a need to maintain sizeable conventional military forces in being for internal security purposes and to keep the European Satellites in the Communist camp. Most importantly, there is a need to develop advanced weapons systems, to strive for a military breakthrough which would resolve the present nuclear stalemate in the Soviets' favor. Should the USSR succeed in developing such superiority, it would not necessarily need to engage in general war. The possession of clear-cut superiority would give them a weapon for political threat and blackmail that could prove decisive, even short of a hot war. For these reasons, the USSR's military effort, as a proportion of gross national product, is greater than that of any other nation in the world. Stated another way, this means that the diversion of economic resources to military support in peacetime is without any parallel in the West.

Secondly, the Soviet leadership for the past 30 years has followed a policy of forced draft industrialization, centered on heavy industry. The reasons for this are many, but they are all consistent with the objective of eventual world domination.

There is, of course, the obvious relationship between heavy industrial capacity and munitions producing capability. Secondly, total investment, and industrial investment in particular, must remain high because growth rates must be substantially above those achieved by the United States. The reason for this is the often

- 3 -

repeated Kremlin objective of catching up with and surpassing the most advanced industrial nations, including the United States, in per capita production. The fulfillment of this objective, Khrushchev believes, will prove the superiority of the Communist system over the free enterprise system. Rapid economic growth lends substance to the Communist image of progress and power. It provides support for the propagation of Communist doctrine abroad, particularly in underdeveloped countries, of rapid industrialization through the Soviet-type organization of society.

All of this suggests that after the necessary allocations to defense and investment, there are few economic resources left over to satisfy consumer requirements. And this is true. However, within the past few years, Khrushchev has embarked on a program to raise the standards of living of the Soviet people. There are two key reasons for this program:

First, to secure more cooperation from the workers so that productivity can increase in a period of labor scarcity, and

Second, to remove the stigma of poverty which attaches to Communism and thereby increase its attractiveness abroad.

Let's take a look at how all of these competing demands for economic resources are resolved today.

(Chart - Comparison of US & USSR GNP by End Use)

1. In absolute amount, Soviet GNP was about 41% of the US in 1957. However, in absolute dollar terms,

- 4 -

a. Defense expenditures were about equal to our own. This means that if we were to purchase the current bill of military goods and services the Soviets are buying, it would cost us about as much as our present military programs.

b. Total investment was about 60% of ours, but investment in mining, manufacturing, and electric power was 80-85% of that in the U.S. This year, such investment may be equal to ours.

c. Consumption, or what the consumer gets, was only 35% of that in the U.S., and on a per capita basis was substantially less than this.

The question of why the average Soviet citizen puts up with this system cannot be answered simply. There are a number of reasons, which can be divided between "carrot" and "stick" types. On the carrot side there is cradle-to-the-grave social security, a small but perceptible year to year improvement in living standards and free education. On the stick side there is the ever present secret police. Propaganda is a powerful force - the creation of a false image of the West as war mongers and capitalist exploiters of the people in contrast to the Communist image of peace and improving standards of living through economic growth.

How do the Soviet leaders control their economy?

#### Control of the Economy

In the Soviet Union, the Communist Party is in complete control of policy formulation and implementation. At the apex,

- 5 -

the highest council is the Party Presidium. This body of 15 members is presided over by Khrushchev, who is First Secretary. The military, the secret police, and professional economic managers no longer have a direct voice in this council.

The Secretariat of the Presidium is the group responsible for the day-to-day interpretation of policy. Of its ten current members, only one, Suslov, has a longer tenure than Khrushchev, and thus is the sole member who does not owe his present position there to Khrushchev. The heir - apparent here is Kirichenko, a full member of the Presidium since 1955, and formerly was First Secretary of the party in the Ukraine.

(Briefing Aid - Soviet Industrial Management)

In the center is the Presidium of the Council of Ministers, of which Khrushchev is also Chairman. This is the top governmental body charged with the implementation of policy, with carrying out decisions of the Party leadership. The two First Deputies are Mikoyan and Kozlov. Kozlov is a former Leningrad party boss who has made rapid advances under Khrushchev and is looked upon as a "comer."

The reorganization of industry and planning, carried out in the past year, has greatly enhanced the role of Gosplan. Gosplan is not only responsible for developing short and long-term economic plans, but because of its newly acquired executive authority, is partially responsible for plan execution. Its chairman is Kuzmin, *Kozygin*

- 6 -

who is also a deputy chairman of the Council of Ministers. Kuzmin was brought in from the party apparatus to this key post.

The Council of Ministers, which includes several members of Gosplan, also has a more political flavor than formerly, because members of the 15 Union Republics sit on it.

The Union Republics have direct control of the newly created councils of national economy in their respective territories, which means an increase of Party Control at the regional level. These councils of national economy, or sovnarhozy, have enterprises subordinate to them which are responsible for producing about 75 per cent of all industrial output. The remaining 25 per cent is under the control of either local governments or the few remaining central ministries and special committees.

The reorganization of 1957, then, substituted a pattern of territorial control over industry, compared to the previous pattern of technically specialized industrial ministries which controlled producing enterprises directly from the center.

The major beneficiaries of the Party's re-established dominance are the apparatchiki, the people who run the party machinery. Khrushchev's attention to economic matters, his persistent demands that party people master a knowledge of economics, and the establishment of special courses for Party workers to this end, indicate that Party officialdom will become increasingly concerned with operations of the economy. This is a shift away from past control of industry by the technical engineering elite - the former industrial ministers. The shift must have engendered

- 7 -

resentment on the part of the industrial elite, and brings into question the degree of success the reorganization may have.

#### Economic Planning

To move on, I should like to review for you, in very brief fashion, the elements of the national economic plan. Actually, there are 13 interrelated sub-plans which make up the whole, and on our next chart the more important ones are highlighted.

#### (Briefing Aid -- Constituent Sub-Plans of the National Economic Plan)

1. Aggregate Indices of Activity. These are monetary estimates of such key elements as gross value of output for industry, agriculture, transport, the volume of retail and foreign trade, the value of capital investment, and so forth.
2. Production. This sub-plan consists of the output schedules for specific commodities in physical units in great detail and is the most important part of the over-all plan.
3. Material Technical Supply. Given the production goals, a schedule of allocations is drawn up designed to provide each producing unit with the amount of raw materials, semifinished goods, and capital equipment needed to meet its production goals. The material balance technique utilizes a series of technological coefficients, or input-output ratios. Gosplan centrally administers the supply of over 1,000 commodities.
4. Capital Investment. The capital investment sub-plan has two primary functions. First, it provides the increased capital

- 8 -

stock estimated to be necessary to meet future production goals. Second, it distributes investment resources in accordance with the priority preferences decided upon by the Soviet leaders.

5. Technology. The introduction of new technological processes has been a separate sub-plan since 1941. The need for industrial innovation has become much more important within the past year because of the need to increase labor productivity. The State Committee on Science and Technology has been retained as an independent body reporting directly to the Council of Ministers, one of two such committees which were retained in the reorganization of 1957.

6. Labor and Cadres. This part of the plan schedules increments to the non-agricultural labor force in accordance with over-all production goals and the planned average increase in output per worker. It also covers technical training plans.

7. Cost of Production (Sebestoimost). These are production cost estimates prepared for each commodity and essential service, which are combined to provide an estimate to total costs. Because of time limitations, I shall skip over the next three items as well as the final two, and turn to the

11. State Budget. The primary function of the state budget is to mobilize the financial resources of the economy and to direct their flow to accomplish the production objectives. The most important financial resource flows are, on the income side,

the income from profits of enterprises and the turnover tax. On the



- 9 -

expenditure side, the most important allocations are to investment and defense. — — — — —

I do not conclude from this analysis that the secret of Soviet success lies in greater efficiency. On the contrary, compared to the leading free enterprise economies of the West, the Communist system is relatively inefficient, in my opinion.

The secret of Soviet success is relatively simple - it directs the flow of a far higher proportion of resources to national policy purposes than does the United States.

#### National Policy Expenditures

I define national policy purposes to include defense, civilian and military research and development, foreign aid, education and investment in industry.

Let's compare the two countries, excluding investment for the moment.

(Briefing Aid - National Policy Expenditures,

1957)

This chart shows that:

1. Soviet defense outlays in 1957, when converted to dollars, were slightly greater than those of the U.S.,
2. That Soviet research and development expenditures were, in total, less than half those of the U.S. However, military r. and d. was about two-thirds of ours.
3. Our foreign aid program was about four times as costly as that of the Russians.

- 10 -

4. With respect to expenditures for education, the outlays in the two countries were quite close. The emphasis in Soviet education, as you all know, is much more on the physical sciences than is the case in our own country. For example, the Soviet Union is graduating 90,000 engineers per year compared to our 37,000 and 20,000 physicians per year compared to our 7,000. The ten American educators who made a month-long visit to the Soviet Union this spring were amazed, and sobered, by "the degree to which the USSR, as a nation, is committed to education as a means of national advancement."

The goals of the Soviet educational system are to: (1) eliminate illiteracy; (2) train the millions of engineers, technicians, and other workers needed for the rapidly growing Soviet economy; and (3) inculcate a sense of pride in national achievements and a sense of loyalty to the Soviet political system. As a consequence of its particular goals, the Soviet educational system differs from the U.S. educational system in three important respects: (1) the curriculum, textbooks, and methods of teaching are laid down by the central government and are standardized throughout the entire Soviet Union; (2) the prestige and real incomes of Soviet teachers are relatively much higher than in the U.S.; (3) education is recognized as by far the most important road for advancement, and the intensity and seriousness of study that prevail throughout the USSR is found only in rare instances in the U.S. educational system.

- 11 -

Turning to investment outlays, we find greater contrasts.

(Briefing Aid - US vs. USSR Capital Investment,  
1957)

1. This chart shows that in 1957, Soviet investment in industry, which includes mining, manufacturing and public utilities, was equal to about 80 to 85 per cent of similar investment in the United States.

2. In contrast, our outlays for transportation and communications, which includes a massive highway building program was nearly three times the comparable Soviet investment.

3. Commercial investment, which includes stores, shopping centers and drive-in movies, was over 7 billions in the U.S., but only about one billion in the USSR.

4. The Soviets put about twice as much money into agriculture as we did. This reflects the traditional neglect of the agricultural sector by Stalin, and the implementation of the Khrushchev pledge to improve living standards through a better diet.

5. Our housing investment was about 75 per cent higher than theirs, even though living space per capita in the United States is already well over four times that in the USSR.

6. "Other" investment includes among other things, outlays for religious institutions, hospitals, water and sewage, and conservation. For these purposes, we spent about two and a half times as much as the Soviets.

- 12 -

In total, the Soviets are devoting, as a proportion of gross national product, over twice as much to these national policy purposes - investment in industry, defense, research and development, education, and foreign aid - as we are. In absolute terms, their outlays in 1957 were nearly 90 per cent of ours.

And here, in my opinion, is the principal economic reason for Soviet success to date.

#### Future Problems

What of the future? Are there any obvious problem areas which will develop into major constraints on future Soviet growth? The Soviet Union is certainly not without economic problems, and the greatest of these center around labor productivity.

Until very recently, the Soviets were able to secure the labor needed for industry and other non-agricultural manpower by draining it off the farms. However, surplus production of agricultural products disappeared, and the USSR reached a point where it was barely feeding itself. Over the past three years, it has not been possible to divert additional manpower from agriculture to industry. Furthermore, the USSR has come into the time period when the low birth rate of the war years is being reflected in fewer workers entering the labor force, perhaps 3 million less in the next seven years as compared with the 1951-58 period. Labor productivity must be increased rapidly if the ambitious goals of economic growth are to be met. No one will doubt that vast improvement is possible. Let's look at a few comparative figures.

- 13 -

✓ (Briefing Aid - US and USSR Population and Employment,

1 July 1957)

1. USSR has a high proportion of population in the labor force - 47 per cent compared to 40 per cent in the US.
2. Although the size of the industrial labor force in the Soviet Union is larger than in the United States, the value of production in U.S. industry was about  $2\frac{1}{2}$  times that of the Soviet Union. In rough terms, industrial labor force productivity is about 35 per cent of that in the U.S.
3. Productivity in Soviet agriculture can only be described as abysmal. It takes almost one farm worker to feed four people compared with about a 1-21 ratio in the U.S.

The Soviets have embarked on a two-pronged attack on the productivity problem. They have programs of direct investment in industry and agriculture on the one hand and a number of programs designed to increase worker incentives.

The extremely ambitious agricultural program has two aims: first, to raise the quality of the Soviet diet to levels approximating that of the United States, and second, to increase agricultural productivity to the point where the transfer of workers to industry can again be resumed. The Soviet diet is uninspiring; it is a drag on worker incentives. Let's take a brief look at some comparative diets.

✓ (Briefing Aid - US and USSR Average Diets)

1. Soviet diet is adequate in calories.
2. However, it is overwhelmingly a grain and potatoes diet.

- 14 -

These staples account for nearly 70 per cent of caloric intake.

3. By U.S. standards, the diet is deficient in fats, oils and milk.

4. The widest discrepancy is in meat. In the US, 12 per cent of total intake is accounted for by meat and fish, compared to 4 per cent in the USSR.

Khrushchev has called upon Soviet agriculture to match the U.S. in per capita production of milk by 1958, and of meat by 1960-61. It seems highly unlikely that such goals can be met.

As a further prop to worker incentives, the USSR has begun to make plans for easing the chronic housing shortage, a cause of widespread dissatisfaction. Current average living-sleeping space for a family of 4 is 13 by 13 feet. This is less than half the current availability in Italy, and about a third that of the U.K. Khrushchev has promised about a 15 per cent improvement in housing space by the end of 1960. He also has promised that the housing shortage will be overcome in the next 10 to 12 years.

Whether this two-pronged attack on the labor productivity problem will succeed, is of course, not possible to predict with absolute accuracy. I would like to make only one comment on it. Both the elaborate plans for technological innovations in industry and the agriculture and housing plans need not succeed completely for the Soviets to realize their goals. The establishment of a trend of improvement in living standards, the acceptance by the workers of the idea that things are getting better and will continue

- 15 -

to get better may be sufficient to bring out the degree of cooperation with the regime which is necessary. This could be true even though Soviet living standards remain well below those in the United States.

Soviet Long-Run Growth

I would like to turn now to the question of long-term economic growth in the USSR. The terms of reference of this series of lectures calls for your consideration of the next decade or two.

There is one competitor for Soviet resources that I have not mentioned, and that is their aid program in underdeveloped areas. I think we should dispose of it before returning to the main stream.

Let's take a quick look at it.

(Briefing Aid - SovBloc Credits and Grants to Underdeveloped Countries of the Free World)

This chart shows:

1. Since 1954, the USSR credits and grants have amounted to about \$1.2 billions. Even if we send the Soviets a bill for the bulk of aid given by other Bloc countries, which is particularly justifiable in the Middle East, where the European Satellites have been used as a front by the USSR, we still get a total of about \$2 billions.

- 16 -

2. This aid, spread over a period of years, amounts to a net drain of \$200 to \$400 millions a year, which is far less than one-half of one per cent of Soviet GNP.

3. The point is that the credit program could increase several fold without becoming a serious drain. A very small change in our projected rates of growth for investment, defense, or consumption would easily absorb the cost of Soviet aid programs.

Given the Soviet leaders determination to catch up with the United States, and given the competing demands for economic resources within the USSR, what is a reasonable projection?

We can start with the various components of gross national product, and by examining past trends in the light of present Communist policy, extrapolate these into the future. Any such projections, of course, are pretty well controlled by the judgments made before the calculator starts to grind out the answers. What follows reflects my own opinions; I do not present it to you as the "school solution."

We can start with investment, and remember that economic growth is most intimately related to this subcomponent of GNP. For a variety of reasons, I expect Soviet investment to increase at 8-10 per cent a year, compared to 12-14 per cent over the past several years. This would be enough to push industrial production up by a rate roughly twice that achieved in the U.S. in the postwar period. While not all the Kremlin leaders would desire, the achievement of such industrial output levels would permit them



to make steady progress in their "overtaking and surpassing the U.S." objective.

Secondly, defense expenditures, in the absence of any genuine disarmament agreement, will continue to increase. How much is most difficult to answer, but taking into account the competing investment and consumer demands, I have selected a 5 per cent a year rate. This is slightly lower than record of the immediate past. However, 5 per cent a year compounded would permit defense outlays to more than double in 15 years, and reach about \$100 billions a year by 1975.

Thirdly, we have to allow for at least a slow but continuous improvement in the Soviet citizen's standards of living. If we set this at 3 per cent a year per capita, which seems likely at least to 1965 in the light of present consumer programs, this means that per capita living standards would be about two-thirds higher by 1975 than they are today.

In summary, what this adds up to is a six per cent rate of increase for Soviet GNP, compared to a rate of about 7 per cent achieved in the 1951-55 period.

Now, if we project forward U.S. growth at 3.5 per cent a year, which seems about right to me, we can compare the development of the two economies over time.

(Briefing Aid - Comparison of US and USSR GNP)

This chart shows:

1. By 1963, Soviet output in total should be nearly half that of the U.S. Thereafter, the absolute gap between the two

- 18 -

economies should start to close.

2. By 1975, Soviet GNP should be approaching two-thirds that of the United States in the same year.

3. By 1975, industrial production in the USSR should be at least equal to 75 per cent of the U.S. level. However, their output of producers goods is expected to exceed our own while our output of consumers goods will still be higher than theirs.

I see that I have more than used up my time, so I will summarize very briefly.

1. The Soviets have succeeded in building an imposing economy. This has been achieved, not because Communism is a particularly efficient system, but because it channels a very high proportion of total resources to serve national policy purposes.

2. The Soviet economy today is supporting a military effort which, measured in absolute terms, is at least equal to that of the United States.

3. As presently structured, the Soviet economy has the capability of continuing a high rate of growth. Total output in five years time probably will be equal to half that of the United States, and thereafter the absolute gap between the two countries should begin to narrow.

4. Undoubtedly the Kremlin leaders believe that their growing economic strength will contribute increasingly to their goal of world domination. Growth in military capabilities will

- 19 -

lead to increasing opportunities for intimidation and blackmail. Further, the projection to the underdeveloped countries of the Communist image of rapid growth is expected to result in voluntary alignments with the Soviet system.